

Figure 1

DSP-12, 1656 Base Pairs

AAGCAGTGGTAAACAACGCAGAGTACGCGGGCGAGGABAATATCTTGCTGGGAGTGGACT
 1TTCCAGTAAGGAAAAGTAAAAGCTGCACCATTTGGG**ATG**GTTCTCTCCGACTGTGGAGCGAC
 ACGAAAATCCACCTTTGATGGAGATGCTGGSTTCCAGCTBAGCACAGCAGGGAAGGATGCA
 CATATTTAAAGCTGTGTGTGTGTCTCCAGGCGAGTGGTCTCTGCTCTGCTTTACAAAGG
 CCTGCGAAGTGGCCCCGGAGGGCACAACTACTTCCCCGGGGGTGTAGCTCTCATCTGGGCT
 ACCTACTATGAGAGCTGCATCAGCTCCGAGCAGAGCTGCATCAACAGAGTGGAAAGCGCA
 GCAGGACCTGGAAGTCTACGCGGGCCCCGACTCCCGCGGCTATTTGTGGACAAGGCCACTG
 AAGGGGAAAGGACCGAGCGCTCATCAAAGCCAAAGCTCCGAAGCATCATGATGAGCCAG
 GATCTAGAAAATGTGACTTCCAAAGAGATTCTTAATCAATTACACAAACAGATGAATTG
 TAACTTGAAGGAACTCAAAGGAATTTATAGACAATGAGATGCTACTTATCTTGGGACAGA
 TGGACAAGCCCTCTCTTATCTTCGATCATCTTTATCTCGGCTCTGAATGGAAATGCATCC
 AATCTGGAGGAACTGCAGGGCTCAGGGGTTGATTACATTTTAAATGTTACCGAGAAAT
 CGATAAATTTTCTGTGGCTTATTTGCATATCATTAACATCCGAGTCTACGATGAAGAGA
 CCACAGACCTCTCTGCCCACTGGAATGAAGCTATCATTTTATAAAACAAAGCGAAGAGG
 AACCATTCCAAGTGGCTGGTGCATTGCAAAATGGGGGTGAGTCTGCTGGGCTCCACAGT
 CATAGCTATGGAATGAAGGAAATCGGCTGCGCTCTGGAAAAAGCATATAACTATGTAA
 AGCAGAAAGCGAGCATCACGCGGCCAACCGCGGCTTTATGAGGCAGCTGTCTGAGTAT
 GAAAGCATCTTGGATGCAAACCAACAGCGGCACAAACAAGCTGTGGGCTCAGCAGACAGA
 CAGCAGCTCCAGCAGCTGTGGATGACCTTGCAAGACCTGGCGACTTCTTGGCAGAGAGA
 CCCCAGATGGCAACCCCGGAAAGCCAGCTGCCCTTCTTGGATGATGCCGCCAGGCCCGG
 TTAGGGCCCCCTCTCTGCTGTTTCCGGGCGACTCTCAGACCCCCTTCTGCTTCCCC
 TGAGGATGAAGCGCGGCAGCTTGGTCCACCTGGAGGATCCGGAGAGGGAGGCTCTGTTGG
 AGGAAGCTGCTCCACCTGCAGAGGTGCACAGGCCCGGCCAGACAGCCCCAGCAAGGTTCC
 GGACTCTGTGAGGAAGGATGTGAAGAAGAAAATAGAGTTTGGGAGTCCCAAAGGTCGGAG
 CGGCTCTTTCTGCAAGTGGAGGAGACCGAAGGGGAGGAGGGGCTGGGAGCAGGGAGGT
 GGGGGCAGCTTCCAAACCGAGCTCGATCAAAAACCTGCTCAACTCGGAGAACCTAAACAAC
 AACAGTAAGAAATTTTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT
 GGACAATCAAGCTTTTAAATCAAGTAAATTTAAATTTAAATTTAAATTTAAATTTAAATTT
 CTACATTAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT
 AGCTCAATCTCAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT
 TAGTGCATACCTTATATAGCAAAATTGAGAAATCTGCTTGGAAATAACACATATCTCTGCAC
 ACCATCTTCAAGGCAATGACCTTATTCATACCTGGGCGAGGGCTTCCACTGCAATTTCT
 TTTTGTGTATGTAATAATTAATAATATATAATTTATCAAGCAAAAAAAAAAAAAAAAAAAAA
 AA

Figure 2

DSP-12, 552 Amino Acids

MVLRLWSDTKIHL DGDGGFSVSTAGRMHIFKPVS VQAMWSALQVLHKACEVARRHNYFP
GGVALIWATYYE SCISSEQSCINENAMQDLESTREDSPALFVDKPT EGERTERLIKAK
LRSIMMSQDLENVTSKEIRNELEKQMNCNLKELKEFIDNEMLLILGQMDKPSLIFDHLY
LGSEWNASNLEELQSGGVDIENVTREICNFFGLFAYHNI RVD EETDLLAHWNEAY
HFINKAKENH SKCL**VHCKMGVSR**SASTVIAYAMKEFGWPLEKAYNYVKQKRSITRPNAG
FMRQLSEYEGILDASKQRHNKLWRQQT DSSLQQPVDDPAGPGDFLPETPDGTPESQLPF
LDDAAQPG LGPPLPCCFRRLSDPLLSPED EAGSLVHLEDPEREALLEEAAPPAEVHRP
ARQPQQGSGLC EKDVKKLEFGSPKGRSGSLLQVEETEREEGLGAGRWGQLPTQLDQNL
LNSENLNNNSKRSCPNGMEVGRAFPAGWHTPSLP SHSNWPTSASVVGTTGTRHHTQLIF
FYCLLWAPSSHLQGPESFTG

Figure 4

DSP-13, 509 Amino Acids

MTLSTLARKRKAPLACTCSLGGPDMIPYFSANAVISQNAINQLISESFLT VKGAALFLPRGNGS
STPRISHRRNKHAGDLQQHLQAMFILLRPEDNIRLAVRLESTYQNRTRYMVVVSTNGRQDTEES
IVLGMD FSSNDSSTCTMGLVLP LWSDTLIHL DGDGGFSVSTDNRVHIEKPVSVQAMWSALQSLH
KACEVARANNYPGSLFLTWTSYYESHINSDQSSVNEWNAMQDVQSHRPDSPALFTDIPTERER
TERLIKTKLREIMMQKDLENITSKEIRTELEMQMVCNLR EFKEFIDNEMIVILGQMDSP TQIFE
HVFLGSEWNASNLEDLQNRGVRYILNVTREIDNFFPGVFEYHNIRVYDEEATDLLAYWNDTYKF
ISKAKKHGSKCL**VHCKMGVSR**SASTVIAIYAMKEYGWNLD RAYDYVKEERTVT KPNPSFMRQLEE
YQGILLASFLGLIHGGRDKPWGEKSTEFESVDLVSIPGSPCCNPEKLLHISHPYLTPSIK

Figure 5

A DSP13 Alternate Splice Variant, 723 Base Pairs

CTGCCCCGGCTTCTAACAGGCCACTGACCGGTAAGTCACTGGGGACCCACGGCTCTAAGTTGTTGAT
CTCTAGAACCAGATTTTGGAAAAGGATTTGCCATTATTGAAGAAAGACAGGATCATTCTTCTTTCTT
TCCCATTTAAGAATAATCGTTATTAAGAATATCGTTTAAAGAATAATCGTTATTTCTCTCTTCTC
AGACCTACTGAACGTGAACGAACAGAAAAGCGTAATTAAAAACCAATTAAGGGAGATC**ATGATGC**
AGAAGGATTTGGAGAATATTACATCCAAAGAGATAAGAACAGAGTTGGAAATGCAAATGGTGTG
CAACTTGGGGAAATCAAGGAATTATAGACAATGAAATGATAGTGATCCTTGGTCAAATGGAT
AGCCCTACACAGATATTTGAGCATGTGTCTCTGGGCTCAGAATGGAATGCCCTCCAACTTAGAGG
ACTTACAGAAACCGAGGGGTACGGTATATCTTGAATGTCACTCGAGAGATAGATAAAGTTCTTCCC
AGGAGTCTTTGAGTATCATAACATTCCGGGTATATGATGAAGAGCCCAACCCATCTCCTGGCCTAC
TGGAAATGACACTTACAAATTGATCTCTAAAGCAAAAGAAACATGGATCTAAATGCCCTTGTGCACT
GCAAAATGGGGGTGAGTGTCTCAGCCCTCAGCCGTGATTGCCCTATGCAATGAAGGAATATGGCTG
GAATCTGACCGAGCCATGACTATGTGAAGAAAGACGAACGGTAACCAAGCCCAACCCCAAGC
TTGATGAGACAACTGGAAGAGTATCAGGGGATCTTGCTGGCAAGCTTCCTAGGCTTGATTTCATG
GAGGGAGGGACAAGCCCTGGGGAGAGAAAAAGCACAGAATTTGAGTCAGTAGATCTGGTTTCCAT
TCCTGGTTTACCCCTCTTGCTGCAACCCCTGAGAAGTTACTTCACATTTCTCATCCTTACCTGACC
CCATCTATAAAAT**TG**AAAATCAAGAGATCCATCTCACAGGGTTATTGTGAATAAAAAATGTGTTTG
AATGTTTATAAAAAAAAAAAAAAAAAAAAAA

B DSP13 Alternate Splice Variant, 241 Amino Acids

MMQKDLNITSKEIRTELEMQMVNLRFFKEFIDNEMIVILGQMDSPQTQIFEHVFLGSEWNASN
LEDLQNRGVRYILNVITREIDNFFPGVFEYHNIRVYDEEATDLLAYWNDTYKFISKAKKHGSKOL
VHCKMGVSRSASTVIAYAMKEYGWNLDRAVDYVKERRTVTKPNPSEMRQLEEYQGILLASFLGL
INPSPKPNVKNITREINVLNLSIRSEEDCNPKYLLHISHPYLTPSIF

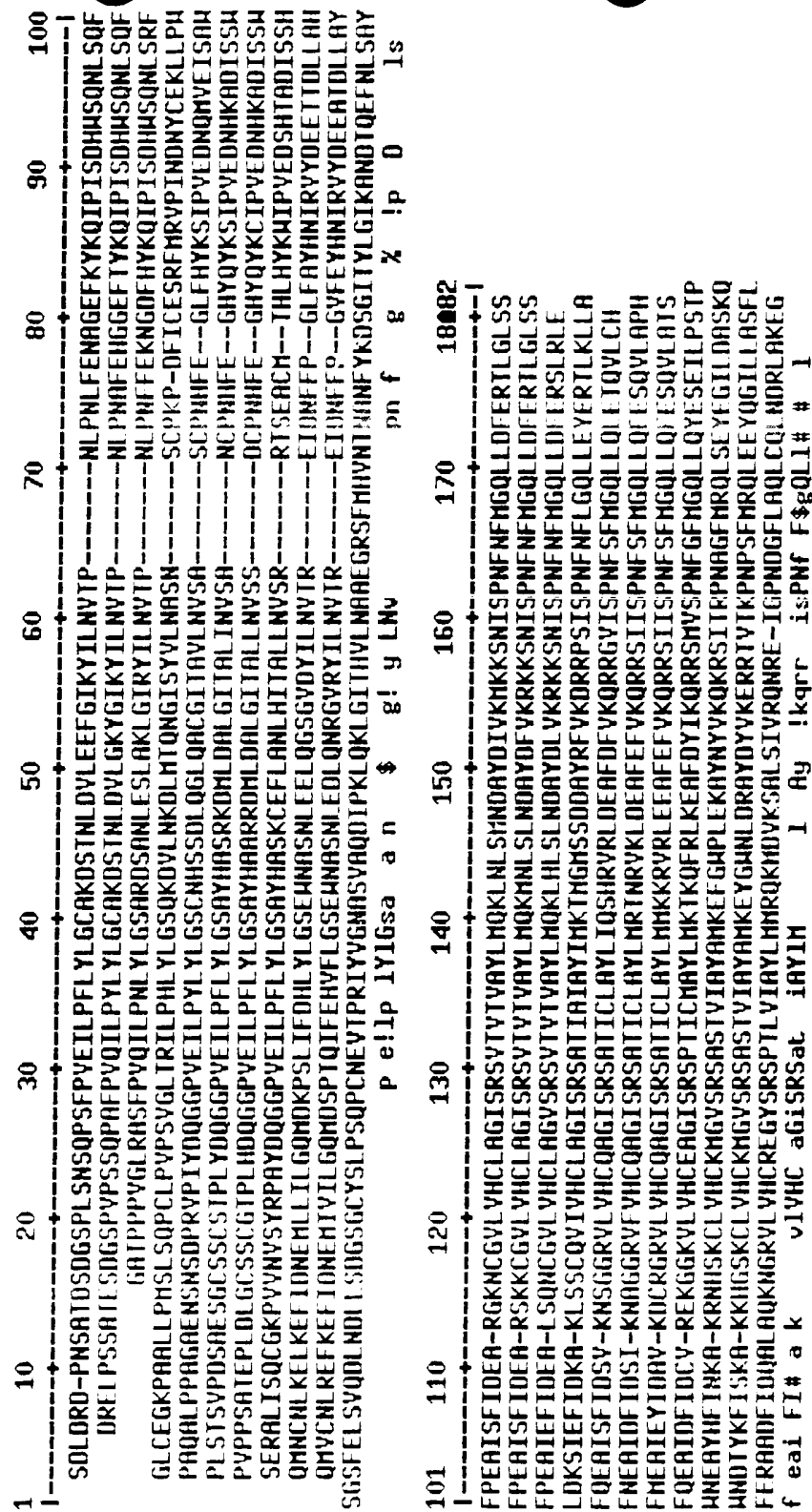


Figure 6

